

Table E-2
Alternative 4^a - Comparison of Maintenance Frequency Using Multiple BMP Pollutant Removal

Sweeping Frequency	Catch Basin Cleaning Frequency	Initial Pollutant Load ^b <i>lbs</i>	BMP 1 ^c <i>% removal</i>	Intermediate Pollutant Load <i>lbs</i>	BMP 2 ^d <i>% removal</i>	Final Pollutant Load <i>lbs</i>	Pounds of Pollutant Removed <i>lbs/yr</i>	Final Removal Efficiency <i>%</i>
TSS								
weekly	annual	13539	77%	3114.0	39.1%	1896.4	11642.6	86%
bi-monthly	annual	13539	60%	5415.6	39.1%	3298.1	10240.9	76%
monthly	annual	13539	50%	6769.5	39.1%	4122.6	9416.3	70%
weekly	bi-annual	13539	77%	3114.0	75.0%	778.5	12760.5	94%
bi-monthly	bi-annual	13539	60%	5415.6	75.0%	1353.9	12185.1	90%
monthly	bi-annual	13539	50%	6769.5	75.0%	1692.4	11846.6	88%
Cadmium								
weekly	annual	0.7	59%	0.3	39.1%	0.2	0.5	75%
bi-monthly	annual	0.7	52%	0.3	39.1%	0.2	0.5	71%
monthly	annual	0.7	46%	0.4	39.1%	0.2	0.5	67%
weekly	bi-annual	0.7	59%	0.3	75.0%	0.1	0.6	90%
bi-monthly	bi-annual	0.7	52%	0.3	75.0%	0.1	0.6	88%
monthly	bi-annual	0.7	46%	0.4	75.0%	0.1	0.6	87%
Copper								
weekly	annual	3.2	53%	1.5	39.1%	0.9	2.3	71%
bi-monthly	annual	3.2	42%	1.9	39.1%	1.1	2.1	65%
monthly	annual	3.2	34%	2.1	39.1%	1.3	1.9	60%
weekly	bi-annual	3.2	53%	1.5	75.0%	0.4	2.8	88%
bi-monthly	bi-annual	3.2	42%	1.9	75.0%	0.5	2.7	86%
monthly	bi-annual	3.2	34%	2.1	75.0%	0.5	2.7	84%
Lead								
weekly	annual	3.1	59%	1.3	39.1%	0.8	2.4	75%
bi-monthly	annual	3.1	52%	1.5	39.1%	0.9	2.2	71%
monthly	annual	3.1	46%	1.7	39.1%	1.0	2.1	67%
weekly	bi-annual	3.1	59%	1.3	75.0%	0.3	2.8	90%
bi-monthly	bi-annual	3.1	52%	1.5	75.0%	0.4	2.8	88%
monthly	bi-annual	3.1	46%	1.7	75.0%	0.4	2.7	87%
Zinc								
weekly	annual	18.6	49%	9.5	39.1%	5.8	12.8	69%
bi-monthly	annual	18.6	39%	11.4	39.1%	6.9	11.7	63%
monthly	annual	18.6	31%	12.8	39.1%	7.8	10.8	58%
weekly	bi-annual	18.6	49%	9.5	75.0%	2.4	16.2	87%
bi-monthly	bi-annual	18.6	39%	11.4	75.0%	2.8	15.8	85%
monthly	bi-annual	18.6	31%	12.8	75.0%	3.2	15.4	83%

^a Alternative 4: High Efficiency Sweeping (BMP 1) + Modified Catch Basin/Cleaning (BMP 2)

^b Initial load based on drainage 6-Lane Alternative

^c Source:

Sutherland, R.C., and S.L. Jelen. 1997. "Contrary to Conventional Wisdom, Street Sweeping can be an Effective BMP." Advances in Modeling the Management of Stormwater Impacts, Vol. 5. Ed., W. James. Computational Hydraulics International. Guelph, Ontario. pp. 179-190.

^d Source:

EPA, 1977. Catchbasin Technology Overview and Assessment. EPA 600/2-77-051. PB-270 092. May 1977. pp. 84.